

10/508766  
DT04 Rec'd PCT/PTO 22 SEP 2004**IN THE CLAIMS:**

*Set forth below in ascending order, with status identifiers, is a complete listing of all claims currently under examination. Changes to any amended claims are indicated by strikethrough and underlining. This listing also reflects any cancellation and/or addition of claims.*

1. (Original) An anti-HPV-16 E7 antibody obtainable by
  - (a) eliciting an in vivo humoral response against highly purified HPV-16 E7 protein or a fragment thereof in a non-human vertebrate; and
  - (b) affinity-purifying antibodies as obtained in the eliciting-step (a).
2. (Original) The anti-HPV-16 E7 antibody of claim 1, wherein said highly purified HPV-16 E7 protein or a fragment thereof is recombinantly produced.
3. (Original) The anti-HPV-16 E7 antibody of claim 2, wherein said HPV-16 E7 protein or said fragment thereof is expressed in *E. coli*.
4. (Currently amended) The anti-HPV-16 E7 antibody of claim 1 ~~any one of claims 1 to 3~~, wherein said highly purified HPV-16 E7 protein or a fragment thereof is purified by a combination of ion exchange chromatography and gel filtration.
5. (Original) The anti-HPV-16 E7 antibody of claim 4, wherein said purification further comprises, prior to ion exchange chromatography and gel filtration, a protein precipitation step.
6. (Currently amended) The anti-HPV-16 E7 antibody of claim 1 ~~any one of claims 1 to 5~~, wherein said affinity purification of the obtained antibodies is carried out over immobilized HPV-16 E7 protein or a fragment thereof.
7. (Original) The anti-HPV-16 E7 antibody of claim 6, wherein said HPV-16 E7 protein or a fragment thereof is immobilized on PVDF membranes, nitrocellulose, sepharose, agarose, DEAE-cellulose or DEAE.

8. (Currently amended) The anti-HPV-16 E7 antibody of claim 1 ~~any one of claims 1 to 7~~, wherein said non-human vertebrate is selected from the group consisting of rat, mouse, rabbit, chicken, sheep, horse, goat, pig and donkey:
9. – 11. (Canceled)
12. (Currently amended) A method for the preparation of a diagnostic composition comprising the step of formulating the anti-HPV-16 E7 antibody of claim 1 ~~any one of claims 1 to 8~~ with a diagnostically acceptable carrier, diluent, buffer, or storage solution.
13. (Currently amended) The ~~use of any one of claims 9 to 11 or the method of claim 12~~, wherein said diagnostic composition further comprises suitable means for detection.
14. (Currently amended) A diagnostic composition comprising the anti-HPV-16 E7 antibody of claim 1, optionally comprising a diagnostically acceptable carrier, diluent, buffer, or storage solution ~~any one of claims 1 to 8 or obtained by the method of claim 12 or 13~~.
15. (Currently amended) ~~Kit~~ A kit comprising an anti-HPV-16 E7 of claim 1 ~~any one of claims 1 to 8~~, or a diagnostic composition comprising the anti-HPV-16 E7 antibody with a diagnostically acceptable carrier, diluent, buffer, or storage solution, and optionally a suitable means for detection ~~of claim 14~~.
16. (Currently amended) An in vitro method for the detection of a sexually transmittable disease or cancer comprising the steps of
- a) incubating a biological sample with anti-HPV-16 E7 antibodies of claim 1 ~~any one of claims 1 to 8~~; and
  - b) measuring and/or detecting specifically-bound anti-HPV-16 E7 antibodies whereby the presence, the absence or the amount of specifically-bound anti-HPV-16 E7 antibodies is indicative for said sexually transmittable disease or cancer.

17. (Currently amended) The in vitro method of claim ~~17~~ 16, further comprising a further step (c), whereby in said step (c) the presence, the absence or the amount of specifically-bound anti-HPV-16 E7 antibodies of step (b) is compared to the presence, the absence or the amount of specifically-bound anti-HPV-16 E7 antibodies in a negative or a positive control sample.

18. (Canceled)

19. (Currently amended) The in vitro method of claim 16, ~~or 17 or the use of claim 11 or claim 18~~ wherein said sexually transmitted disease is an HPV16-infection or wherein said cancer is cervical cancer, breast cancer/mamma cancer, prostate cancer, head and neck cancer, penil cancer and/or anogenital cancer/neoplasia (AIN).

20. (Original) A method for the production of an anti-HPV-16 E7 antibody comprising the steps of

(a) eliciting an in vivo humoral response against highly purified, HPV-16 E7 protein or a fragment thereof in a non-human vertebrate; and

(b) affinity-purifying antibodies as obtained in the eliciting-step (a).

21. (Currently amended) The method ~~anti-HPV-16 E7 antibody of any one of claims 1 to 9 or the method~~ of claim 20, wherein said highly purified HPV-16 E7 protein or said fragment thereof is a native, highly purified HPV-16 E7 protein or a fragment thereof.

22. (New) The anti-HPV-16 E7 antibody of claim 1, wherein said highly purified HPV-16 E7 protein or said fragment thereof is a native, highly purified HPV-16 E7 protein or a fragment thereof.

23. (New) The method of claim 16, wherein said biological sample is obtained from Pap-smears, cervical (carcinoma) biopsies, anogenital biopsies, mamma biopsies, head- or neck biopsies or prostate biopsies.

24. (New) The method of claim 16, wherein said detection is used for evaluating the risk of acquiring a sexually transmitted disease or cancer, for measuring the status of an existing sexually transmitted disease or cancer, or for screening therapy efficiency in the treatment of a sexually transmitted disease or cancer.